



NEX77/CIP2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: GOLD *ET AL.* )  
SERIAL NO.: 09/616,284 ) ART UNIT:  
FILED: JULY 14, 2000 ) EXAMINER:  
FOR: METHOD AND APPARATUS )  
FOR THE AUTOMATED )  
GENERATION OF NUCLEIC )  
ACID LIGANDS )

Assistant Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Dear Sir:

In regard to the referenced application, Applicants respectfully request that the following amendments be entered. The purpose of these amendments is to correct minor typographical errors in the specification and to update prior application information.

AMENDMENTS

IN THE SPECIFICATION

On page 1, please delete lines 9-11 and insert the following:

--This application is a continuation-in-part of U.S. Patent Application Serial No. 09/356,233, filed July 16, 1999, entitled "Method and Apparatus for the Automated Generation of Nucleic Acid Ligands," which is a continuation-in-part of U.S. Patent Application Serial No. 09/232,946, filed January 19, 1999, entitled "Method and Apparatus for the Automated Generation of Nucleic Acid Ligands," which is a continuation-in-part of U.S. Patent Application

37 CFR 1.8  
CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Assistant Commissioner for Patents, Washington, D.C. 20231 on September 15, 2000.

Signature: Mary Ann Holland  
Name: Mary Ann Holland

Serial No. 08/792,075, filed January 31, 1997, entitled "Flow Cell SELEX," now U.S. Patent No. 5,861,254 and a continuation-in-part of U.S. Patent Application Serial No. 09/143,190, filed August 27, 1998, entitled "Nucleic Acid Ligands," now U.S. Patent No. 6,111,099, which is a continuation of U.S. Patent Application Serial No. 08/469,609, filed June 6, 1995, entitled "Method for Detecting a Target Molecule in a Sample Using a Nucleic Acid Ligand," now U.S. Patent No. 5,843,653, which is a continuation of U.S. Patent Application Serial No. 07/714,131, filed June 10, 1991, entitled "Nucleic Acid Ligands," now U.S. Patent No. 5,475,096, which is a continuation-in-part of U.S. Patent Application Serial No. 07/536,428, filed June 11, 1990, entitled "Systematic Evolution of Ligands by Exponential Enrichment," now abandoned. --

On page 1 line 30 after "5,475,096" please insert -- and --.

On page 11, line 18, please replace "cartesian" with -- Cartesian --.

On page 16, line 8, please replace "illustrate" with -- illustrates --.

On page 20, line 7, before "single-stranded" please insert -- a --.

On page 20, line 17, before "extended" and insert -- be --.

On page 41, line 27, please insert -- (SEQ ID NO:3) --.

On page 42, line 4, at the end of the line, please insert -- (SEQ ID NO: 4) --.

On page 42, line 6, at the end of the line, please insert -- (SEQ ID NO: 5) --.

#### IN THE CLAIMS

1. (amended) A method for the automated identification of a nucleic acid ligand from a candidate mixture of nucleic acids, said nucleic acid ligand being a ligand of a given target comprising:

a) contacting the candidate mixture with the target, wherein nucleic acids having an increased affinity to the target relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;

b) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and

c) amplifying the increased affinity nucleic acids to yield a ligand-enriched mixture of nucleic acids, wherein a nucleic acid ligand is identified, wherein steps (a)-(c) are performed

at one or more work stations on a work surface by a [cartesian] Cartesian robotic manipulator controlled by a computer.

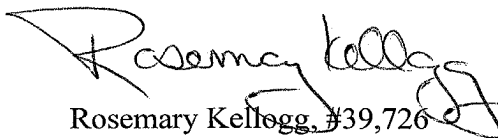
18. (Amended) A method for identifying a nucleic acid ligand that photocrosslinks to a protein from a candidate mixture of nucleic acids. wherein each member of said candidate mixture contains a photoreactive group. said method comprising:

- a) contacting said candidate mixture with said protein. wherein nucleic acids having an increased affinity to the protein relative to the candidate mixture form nucleic acid-protein complexes with the protein;
- b) irradiating said complexes, wherein said nucleic acid-protein photocrosslink;
- c) partitioning the photocrosslinked nucleic acid-protein complexes from the remainder of said candidate mixture; and
- d) identifying a nucleic acid ligand that photocrosslinked to the protein; wherein steps (a)-(c) are performed at one or more work stations on a work surface by a [cartesian] Cartesian robotic manipulator controlled by a computer.

#### REMARKS

By the foregoing amendment, claims 1 and 18 have been amended. It is believed that no fees are due with this submission. If this is in error, please charge Deposit Account No. 19-5117.

Respectfully submitted,



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cc: V. Appleby

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